CHAPTER 62-673 PHOSPHOGYPSUM MANAGEMENT

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62-673.200 Definitions.

The following words, phrases or terms as used in this chapter, unless the context indicates otherwise, shall have the following meaning:

- (1) "Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells, springs or surface water.
- (2) "Closing" means the time at which a phosphogypsum stack system ceases to accept wastes, and includes those actions taken by the owner or operator of the facility to prepare the system for any necessary monitoring and maintenance after closing.
- (3) "Closure" means the cessation of operation of a phosphogypsum stack system and the act of securing such a system so that it will pose no significant threat to human health or the environment. This includes closing, long-term monitoring, maintenance and financial assurance.
 - (4) "Department" means the State of Florida Department of Environmental Protection.
- (5) "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste into or upon any land or water so that such solid waste or any constituent thereof may enter other lands or be emitted into the air or discharged into any waters, including groundwaters, or otherwise enter the environment.
- (6) "Facility" means all contiguous land and structures, other appurtenances and improvements on the phosphate fertilizer manufacturing complex.
 - (7) "Final cover" means the materials used to cover the top and sides of a phosphogypsum stack upon closure.
- (8) "Geomembrane" means a low-permeability synthetic membrane used as an integral part of a system designed to limit the movement of liquid or gas in the system.
- (9) "Lateral expansion" means the expansion, horizontally, of phosphogypsum or process wastewater storage capacity beyond the permitted capacity and design dimensions of the phosphogypsum stack, or cooling ponds, surge ponds, and perimeter drainage conveyances at an existing facility. Any phosphogypsum stack, cooling pond, surge pond, or perimeter drainage conveyance which is constructed within 2000 feet of an existing phosphogypsum stack system, measured from the edge of the expansion nearest to the edge of the footprint of the existing phosphogypsum stack system, is considered a lateral expansion.
 - (10) "Leachate" means liquid that has passed through or emerged from phosphogypsum.
- (11) "Liner" means a continuous layer of low permeability natural or synthetic materials which controls the downward and lateral escape of waste constituents or leachate from a phosphogypsum stack system.
- (12) "100-year floodplain" means the lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, that are inundated by the 100-year flood.
- (13) "Phosphogypsum" means calcium sulfate and byproducts produced by the reaction of sulfuric acid with phosphate rock to produce phosphoric acid. Phosphogypsum is a solid waste within the definition of Section 403.703(13), F.S.
- (14) "Phosphogypsum stack" means any defined geographic area associated with a phosphoric acid production facility in which phosphogypsum is disposed of or stored, other than within a fully enclosed building, container or tank.
- (15) "Phosphogypsum stack system" means the phosphogypsum stack (or pile, or landfill), together with all pumps, piping, ditches, drainage conveyances, water control structures, collection pools, cooling ponds, surge ponds and any other collection or conveyance system associated with the transport of phosphogypsum from the plant to the phosphogypsum stack, its management at the stack, and the process wastewater return to the phosphoric acid production or other process. This definition specifically includes toe drain systems and ditches and other leachate collection systems, but does not include conveyances within the confines of the

fertilizer production plant or existing areas used in emergency circumstances caused by rainfall events of high volume or duration for the temporary storage of process wastewater to avoid discharges to surface waters of the state, which process wastewater shall be removed from the temporary storage area as expeditiously as possible not to exceed 120 days after each emergency.

- (16) "Process wastewater" means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product, along with any leachate or runoff from the phosphogypsum stack system. This term does not include contaminated nonprocess wastewater as that term is defined in 40 CFR 418.11(c).
- (17) "Related parties" means affiliates of the enterprise; entities for which investments are accounted by the equity method by the enterprise; trusts for the benefit of employees, such as pension and profit-sharing trusts that are managed by or under the trusteeship of management; principal owners of the enterprise; its management; members of the immediate families of principal owners of the enterprise and its management; and other parties with which the enterprise may deal if one party controls or can significantly influence the management or operating policies of the other to an extent that one of the transacting parties might be prevented from fully pursuing its own separate interests. Another party also is a related party if it can significantly influence the management or operating policies of the transacting parties or if it has an ownership interest in one of the transacting parties and can significantly influence the other to an extent that one or more of the transacting parties might be prevented from fully pursuing its own separate interests.
 - (18) "Shallow water supply well" means any potable water well which pumps water from an unconfined water table aquifer.
- (19) "Stack system configuration as of the end of its useful life" means the maximum physical dimensions of the phosphogypsum stack system as provided by the applicant in a general plan and schedule for closure or a closure plan submitted to the Department pursuant to Rule 62-673.600 or 62-673.610, F.A.C.

Specific Authority 403.061, 403.4154, 403.704 FS. Law Implemented 403.4154, 403.703, 403.707 FS. History-New 3-25-93, Formerly 17-673.200, Amended 7-2-05.

62-673.220 Applicability.

- (1) The provisions of this chapter apply to new phosphogypsum stack systems or lateral expansions of existing phosphogypsum stack systems for which a complete permit application or request for modification of an existing permit is submitted after 3-25-93.
- (a) Except for incidental deposits of phosphogypsum entrained in the process wastewater, placement of phosphogypsum outside the phosphogypsum stack footprint is considered a lateral expansion of the phosphogypsum stack system. The footprint is defined as the outside edge of the starter dikes used to contain the placement of phosphogypsum in the stack.
- (b) Storage or containment of process wastewater outside the footprint of the phosphogypsum stack, cooling ponds, surge ponds, or perimeter drainage conveyances existing on 3-25-93 is considered a lateral expansion of the phosphogypsum stack system. The footprint is defined as the outside edge of the dams, dikes or ditches used to store or contain process wastewater.
- (2) Rule 62-673.500, F.A.C., shall also apply to existing active facilities after 3-25-93 at the time of permit renewal, or upon issuance of a temporary operating permit.
- (3) Rules 62-673.600-.650, F.A.C., apply to all phosphogypsum stack systems, whether planned, active, or inactive as described in subsection 62-673.600(1), F.A.C.
- (4) Lateral expansions of phosphogypsum stack systems are considered existing installations as defined in Chapter 62-522, F.A.C.
- (5) Notwithstanding the provisions of paragraph (1)(a) of this rule, placement of phosphogypsum into an existing process wastewater area located adjacent to and extending to no more than 350 feet from the edge of the footprint of an existing phosphogypsum stack is not considered a lateral expansion if:
- (a) By [3-25-93 + 3 months], the owner or operator of the phosphogypsum stack system submits to the Department an application for a construction permit for the additional placement area which demonstrates that such placement will not result in a violation of applicable Department ground water standards or criteria:
- (b) By [3-25-93 + 3 months], the owner or operator of the phosphogypsum stack system submits to the Department an application, which includes detailed design features, for a permit to construct a new lined cooling pond which meets the design requirements of Rule 62-673.400, F.A.C., and this cooling pond is constructed within two years of the issuance of the construction permit; and
 - (c) No phosphogypsum is placed in any unlined area after [3-25-93 + 8 years].

Specific Authority 403.061, 403.4154, 403.704 FS. Law Implemented 403.4154, 403.707 FS. History-New 3-25-93, Formerly 17-673.220.

62-673.300 Prohibitions.

- (1) No person shall dispose of, or store prior to disposal, any phosphogypsum except within a phosphogypsum stack system permitted by the Department in accordance with this chapter. This provision shall not be construed to prohibit any use or reuse of phosphogypsum not otherwise prohibited by law.
- (2) Material subject to the licensure requirements of Chapter 404, F.S., and Chapter 64E-5, F.A.C., shall only be placed on a phosphogypsum stack in accordance with the terms of that license issued by the Department of Health and Rehabilitative Services.